



**DEPARTMENT OF
FINANCE**

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September 11, 2015

Ken Rider
California Energy Commission
MS 25
1516 Ninth Street
Sacramento, CA 95814

Dear Mr. Rider:

Thank you for submitting the standardized regulatory impact assessment (SRIA) and the summary (Form DF-131) for the proposed regulations on energy efficiency for lamps, as required in California Code of Regulations, title 1, section 2002(a)(1). As the proposed regulations were not attached, we are unable to conclude whether the SRIA covers all impacts that may occur as a result of the regulations that will be submitted to the Office of Administrative Law for public comment. These comments are thus based solely on the SRIA.

The proposed regulations will require small-diameter directional and light-emitting diode (LED) lamps sold in California to meet minimum energy-efficiency performance standards by 2019. Some small-diameter directional lamps already meet or exceed these standards. Consumers and businesses would pay an additional \$4 per lamp when replacing non-compliant small-diameter directional lamps, with a total cost of \$38.3 million in 2018. The cost would be offset by recurring energy savings, as well as reduced lamp replacement frequency, for a benefit totaling \$309.9 million in 2018, which would increase over time.

Most existing general-purpose LED lamps affected by the proposed regulations can meet the standards with small changes. The additional cost of switching to compliant LED lamps would be \$49.1 million in 2019 for residential consumers and businesses, and would be offset by lower electricity usage of \$44 million in 2019, which was projected to increase over time.

Other benefits from the proposed regulations include improved air quality from avoided electricity generation and avoided greenhouse gas emissions, which also lead to health benefits. The Energy Commission used REMI PI+ to estimate total economic impacts from 2017 to 2029.

Finance generally concurs with the methodology used to estimate the annual impacts under the proposed regulations. However, there are two areas where the analysis is incomplete. First, although the SRIA discussed the impact of cost savings and prices on businesses, the SRIA did not address the impact on new business creation and existing business elimination, as required by Government Code section 11346.3(b)(1)(B) which is implemented in the Finance's regulations [Cal. Code Regs. tit. 1, § 2003(a)(3)(B)]. Second, state agencies will be affected by the additional cost of compliant lamps and the ensuing electricity savings; the resource impact on these agencies and on the Energy Commission in terms of enforcement need to be illuminated in the SRIA as well. In addition, we suggest augmenting the analysis with additional sensitivity tests on the baseline, and additional explanations on some health benefits.

The Energy Commission acknowledged that new federal LED standards could replace the proposed standards prior to 2029. The description of the baseline should address this possibility and how it would affect the calculation of economic impacts, especially given that the costs of the regulation are front-loaded. If federal standards supersede California standards within the first few years of the regulation, both anticipated costs and benefits of the regulations could be lower.

The SRIA estimated a health benefit of \$33 to \$222 million due to the avoided electricity generation. A discussion on the sensitivity of assumptions, types of health effects (mortality vs. morbidity), and valuation of health effects would help explain uncertainty of the estimate. The Energy Commission used REMI to measure the macroeconomic impact of cost savings and COBRA to measure the air quality benefit of avoided electricity generation from reductions in electricity usage. The macroeconomic impact is cumulative over the years as more electricity savings are realized. The annual air quality impact may be more sensitive to the composition of particulate matters, nitrogen oxides, and sulfur dioxides, than the Energy Commission assumes.

Although the proposed regulations do not directly affect compact fluorescent lights, the Energy Commission may want to assess the possibility of switching out of these lights due to the special disposal requirement from their hazardous mercury content and the long-life span of LED lamps. The disposal convenience and large savings from the compliant lamps may prompt consumers to switch from compact fluorescent lights, leading to even larger environmental benefits, and the possible secondary effects of such conversions could be added to the analysis.

These comments are intended to provide sufficient guidance outlining revisions to the SRIA. The SRIA, a summary of Finance's comments, and any responses must be included in the rulemaking file that is available for public comment. Finance understands that the proposed regulations may change during the notice of proposed action, or after the public comment period. If any significant changes to the proposed regulations result in economic impacts not discussed in the SRIA, please note that the revised economic impacts must be reflected on the Standard Form 399 for the rulemaking file submittal to the Office of Administrative Law. Please let us know if you have any questions regarding our comments.

Sincerely,



Irena Asmundson
Chief Economist

cc: Ms. Panorea Avdis, Governor's Office of Business and Economic Development
Ms. Debra Cornez, Office of Administrative Law
Ms. Consuelo Martinez, California Energy Commission
Mr. Harinder Singh, California Energy Commission
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